

**Table 4.6**  
**Commitments per Student**  
**Activity through June 6, 2006**

Service Type	Funding Year 2002 Commitments		Funding Year 2003 Commitments		Funding Year 2004 Commitments		Funding Year 2005 Commitments	
	(Millions)	Per Student <sup>1</sup>	(Millions)	Per Student <sup>2</sup>	(Millions)	Per Student <sup>3</sup>	(Millions)	Per Student <sup>4</sup>
Telecommunications	\$855	\$17.49	\$885	\$17.99	\$948	\$19.27	\$910	\$18.49
Internet Access	\$245	\$5.02	\$267	\$5.43	\$241	\$4.89	\$250	\$5.09
Internal Connections	\$1,106	\$22.62	\$1,518	\$30.85	\$1,096	\$22.27	\$514	\$10.45
Total	\$2,206	\$45.12	\$2,671	\$54.28	\$2,284	\$46.73	\$1,674	\$34.03

**Table 4.7**  
**Disbursements per Student**  
**Activity through June 6, 2006**

Service Type	Funding Year 2002 Disbursements		Funding Year 2003 Disbursements		Funding Year 2004 Disbursements		Funding Year 2005 Disbursements	
	(Millions)	Per Student <sup>1</sup>	(Millions)	Per Student <sup>2</sup>	(Millions)	Per Student <sup>3</sup>	(Millions)	Per Student <sup>4</sup>
Telecommunications	\$589	\$12.05	\$636	\$12.92	\$646	\$13.14	\$250	\$5.08
Internet Access	\$166	\$3.40	\$194	\$3.95	\$185	\$3.75	\$120	\$2.44
Internal Connections	\$722	\$14.77	\$1,030	\$20.93	\$528	\$10.74	\$111	\$2.26
Total	\$1,477	\$30.22	\$1,860	\$37.80	\$1,359	\$27.63	\$482	\$9.79

Note: Data will be revised as further disbursements occur.

<sup>1</sup> Preliminary estimates of the number of students enrolled in the fall of the 2002 - 2003 school year (including territories) was 48.876 million.

Source: U.S. Department of Education at [nces.ed.gov/ccd/bat](http://nces.ed.gov/ccd/bat).

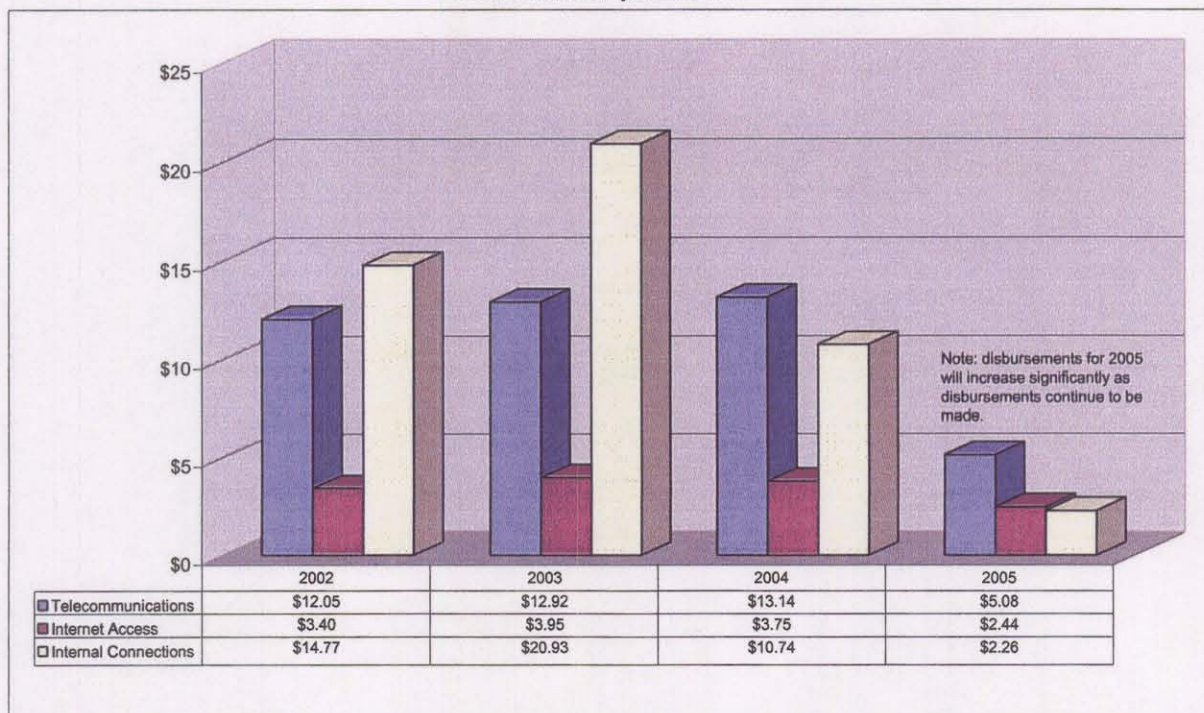
<sup>2</sup> Estimation of the number of students enrolled in the fall of the 2003 - 2004 school year (including territories) was 49.202 million.

Source: U.S. Department of Education at [nces.ed.gov/ccd/bat](http://nces.ed.gov/ccd/bat).

<sup>3</sup> The number of students for the 2004 - 2005 school year was not available at the cutoff date for this report, so the number from the 2003 - 2004 school year was used.

<sup>4</sup> The number of students for the 2005 - 2006 school year was not available at the cutoff date for this report, so the number from the 2003 - 2004 school year was used.

**Chart 4.1**  
**Disbursements per Student**



## 5. Rural Health Care Support

The portion of the 1996 Telecommunications Act that covers universal service support for rural health care providers states that “[a] telecommunications carrier shall . . . provide telecommunications services . . . to any public or non-profit health care provider . . . at rates that are reasonably comparable to rates charged for similar services in urban areas in that state.”<sup>1</sup> The Commission’s universal service rules permit eligible health care providers<sup>2</sup> to receive support for any telecommunications service.<sup>3</sup>

In 2003, the FCC significantly changed the universal service support mechanism for rural health care providers, effective in Funding Year 2004 (July 1, 2004 – June 30, 2005). Dedicated emergency departments of rural for-profit hospitals that participate in Medicare are now deemed “public” health care providers eligible to receive prorated rural health care support.<sup>4</sup> Further, rural health providers may now receive support for any form of Internet access reasonably related to the health care needs of the facility.<sup>5</sup> Rural health care providers may also use “safe harbor” categories to compare the urban and rural rates for functionally similar services as viewed from the perspective of the end user.<sup>6</sup> Also, rural health care providers may compare their rural rates to urban rates in any city with a population of at least 50,000 in the state, as opposed to the nearest city with a population of 50,000.<sup>7</sup> Finally, rural health care providers may receive discounts for satellite services even where alternative terrestrial-based services may be available.<sup>8</sup>

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1 47 U.S.C. § 254(h)(1)(A).

2 47 C.F.R. § 54.601.

3 A 1.544 Mbps (T1) maximum bandwidth cap was employed in Funding Years 1 and 2. *See Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report and Order, 12 FCC Rcd 8776, 8952-94 (1997). The Commission removed the bandwidth cap for year three and beyond. *See Federal-State Joint Board on Universal Service*, CC Docket Nos. 97-21 and 96-45, Sixth Order on Reconsideration in CC Docket No. 97-21, Fifteenth Order on Reconsideration in CC Docket No. 96-45, 14 FCC Rcd 18756 (1999) (*Fifteenth Order on Reconsideration*).

4 *See Rural Health Care Support Mechanism*, WC Docket No. 02-60, Report and Order, Order on Reconsideration and Further Notice of Proposed Rulemaking, 18 FCC Rcd 24546 (2003) (*Rural Health Care Order*) at 13.

5 *See Rural Health Care Order* at 22.

6 *See Rural Health Care Order* at 33.

7 *See Rural Health Care Order* at 37.

8 *See Rural Health Care Order* at 44.

In December 2004, the Commission released a *Second Order*<sup>9</sup> that further modified the Commission's rules for rural health care support. In this *Second Order*, the Commission changed its definition of rural for the purposes of the rural health care support mechanism. Now a "rural area" is an area that is not located within or near a large population base. Specifically, a "rural area" is an area that (a) is entirely outside of a Core Based Statistical Area (CBSA); (b) is within a CBSA that does not have any urban area with a population of 25,000 or greater; or (c) is in a CBSA that contains an urban area with a population of 25,000 or greater, but is within a specific census tract that itself does not contain any part of a place or urban area with a population of greater than 25,000. This new definition was effective as of Funding Year 2005 (July 1, 2005 – June 30, 2006). Several other rules also were changed. The Commission expanded funding for mobile rural health care providers by subsidizing the difference between the rate for the satellite service and the rate for an urban wireline service with a similar bandwidth. June 30 is now the final deadline for applications for support for health care providers seeking discounts for a specific funding year under the rural health care support mechanism. In addition, a rural health care provider in a state that is entirely rural may now receive support for advanced telecommunications and information services.

USAC recently streamlined the application process for the Rural Health Care mechanism. USAC combined the information from two forms onto one,<sup>10</sup> allowed the new form to be filled out electronically, and, where possible, prefilled the form with that applicant's information.<sup>11</sup> Now, an eligible rural health care provider seeking funding must first submit FCC Form 465 (description of services requested and certification form) to the Rural Health Care Division (RHCD).<sup>12</sup> If the RHCD determines that the health care provider is eligible, it posts the Form 465 on its website.<sup>13</sup>

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9     *See Rural Health Care Support Mechanism*, WC Docket No. 02-60, Second Report and Order, Order on Reconsideration, and Further Notice of Proposed Rulemaking, 19 FCC Rcd 24613 (2004) (*Second Order*).

10    FCC Forms 466 and 468 were combined into the new FCC form 466.

11    *See* [www.rhc.universalservice.org/whatsnew/062003.asp#2](http://www.rhc.universalservice.org/whatsnew/062003.asp#2)

12    The Rural Health Care Corporation merged into the Universal Service Administrative and became the Rural Health Care Division on January 1, 1999. *See Changes to the Board of Directors of the National Exchange Carrier Association, Inc., Federal-State Joint Board on Universal Service*, CC Docket Nos. 97-21 and 96-45, Third Report and Order in CC Docket No. 97-21 and Fourth Order on Reconsideration in CC Docket No. 97-21 and Eighth Order on Reconsideration in CC Docket No. 96-45, 13 FCC Rcd 25058, 25064-65, para. 12 (1998).

13    The forms may be viewed at [www.rhc.universalservice.org/telecomcarriers/searchpostings/default.asp](http://www.rhc.universalservice.org/telecomcarriers/searchpostings/default.asp).

Twenty-eight days thereafter, the rural health care provider may contract with the most cost-effective bidder. The health care provider then fills out FCC Form 466 (Funding Request and Certification Form) and/or 466-A (Internet Service Funding Request and Certification Form), and submits it to the RHCD. Upon receipt and approval of FCC Form 466, the RHCD sends a Funding Commitment Letter to the rural health care provider. The letter explains that the request has received preliminary approval, and provides an estimate of the amount of support that can be expected. The rural health care provider must respond by submitting FCC Form 467 (receipt of service confirmation form) to verify that the service has begun. RHCD then sends a Support Schedule to the carrier and the health care provider. The carrier provides service to the rural health care provider, and then invoices the RHCD for the support amount. Upon approval of the invoice, USAC reimburses the carrier.

By rule, the Commission has established a \$400 million per funding year cap for the rural health care mechanism.<sup>14</sup> For more information on the Universal Service Program for Rural Health Care providers, visit the RHCD website.<sup>15</sup>

USAC supplied the Commission with funding commitments and disbursements information as of June 30, 2006.<sup>16</sup> Table 5.1 summarizes funding disbursements for all funding years by service speed. Tables 5.2 through 5.4 show details for Funding Years 2003 through 2005. For details on the preceding funding years, see the previous editions of the *Monitoring Report*.<sup>17</sup> Table 5.2 summarizes funding commitments and disbursements on a state-by-state basis.

Funding Year 2003 was July 1, 2003, through June 30, 2004. USAC estimates Funding Year 2003 demand will be \$26.25 million.<sup>18</sup>

Funding Year 2004 was July 1, 2004, through June 30, 2005. USAC reports that 2,999 FCC Forms 465 have been posted and that it received 4,667 Form 466 and 466-A packets, including 801 packets from applicants seeking support for Internet access only.<sup>19</sup> Of the 4,667

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14 47 C.F.R. § 54.623(a).

15 See [www.rhc.universalservice.org](http://www.rhc.universalservice.org).

16 Because of the appeals process, funding commitments and disbursements may be made after the program year ended.

17 Earlier editions of the *Monitoring Reports* are available at this URL:  
[www.fcc.gov/wcb/iatd/monitor.html](http://www.fcc.gov/wcb/iatd/monitor.html).

18 Universal Service Administrative Company, *Federal Universal Service Support Mechanisms Fund Size Projections for the Third Quarter 2006*, at 15.

19 Universal Service Administrative Company, *Federal Universal Service Support*

packets, 133 were denied, 332 were withdrawn by the applicant, two were complete and ready to process, and the rest were completely processed.<sup>20</sup> As of June 30, 2006, over \$35.5 million had been committed, and nearly \$25.5 million had been disbursed.<sup>21</sup>

Funding Year 2005 was July 1, 2005, through June 30, 2006. USAC reports that it posted 3,413 Form 465 packets, and received 2,985 Form 466 and 466-A packets. Of these packets, 1,281 have been completely processed, 295 are awaiting supervisory approval only, 39 are complete and ready to process, 158 have been withdrawn by the applicant, 15 have been denied, and 1,197 were incomplete or require clarification.<sup>22</sup> As of June 30, 2006, more than \$22.6 million had been committed, and more than \$7.7 million had been disbursed.<sup>23</sup> USAC estimates Funding Year 2005 demand will be approximately 36% higher than demand in Funding Year 2004, resulting in Funding Year 2005 demand of about \$38.165 million.<sup>24</sup>

Table 5.3 shows state-by-state disbursements by service speed for Funding Years 2003 through 2005. In some instances, such as with frame relay service, the service speed was not clearly identifiable. Whenever possible, the most likely speed for each service was assumed. For example, Frame Relay theoretically could be provided at voice grade speeds, but the vast majority of it is provided at broadband speeds (200K to 1.49Mb), so Frame Relay was assumed to be broadband at that level.

Table 5.4 shows, for Funding Years 2003 and 2004, state-by-state disbursements from the Rural Health Care Support Mechanism, the population of the rural areas, and the disbursements per person in rural areas.

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*Mechanisms Fund Size Projections for the Third Quarter 2006, at 15.*

20 Universal Service Administrative Company, *Federal Universal Service Support Mechanisms Fund Size Projections for the Third Quarter 2006*, at 16.

21 See Table 5.2.

22 Universal Service Administrative Company, *Federal Universal Service Support Mechanisms Fund Size Projections for the Third Quarter 2006*, at 16-17.

23 See Table 5.2.

24 Universal Service Administrative Company, *Federal Universal Service Support Mechanisms Fund Size Projections for the Third Quarter 2006*, at 16-17.

**Table 5.1**  
**Rural Health Care Funding Disbursements by Funding Year**

<b>Funding Year</b>	<b>Voice Grade</b>	<b>Broadband</b>		<b>Other Service or Speed Unknown</b>	<b>Total</b>
	<b>56K to 199K</b>	<b>200K to 1.49Mb</b>	<b>1.5Mb and faster</b>		
1998	\$202,778	\$880,375	\$2,292,252	\$0	\$3,375,405
1999	452,992	1,073,816	2,719,619	58,132	4,304,559
2000	613,595	3,015,004	6,685,573	0	10,314,172
2001	319,539	8,110,537	10,125,267	0	18,555,343
2002	423,756	10,639,476	10,405,314	0	21,468,545
2003	474,651	11,027,242	13,095,924	7,559	24,605,376
2004	529,770	10,215,472	14,274,426	471,754	25,491,422
2005	18,375	3,381,790	4,121,309	234,404	7,755,878

Note: Disbursements through June 30, 2006. Because of the appeals process, funding commitments and disbursements may be made after the program year ended.

Source: USAC data. Rollups performed by the Industry Analysis and Technology Division, Wireline Competition Bureau, FCC.

**Table 5.2**  
**Rural Health Care Funding Commitments and Disbursements by State**

**Funding Year 2003: July 1, 2003 through June 30, 2004**

State	Total Funds Committed	Providers Receiving Support	Total Funds Disbursed	Providers Receiving Support
Alabama	\$28,736	4	\$28,736	4
Alaska	16,882,404	203	15,060,505	155
Arizona	1,182,242	62	786,478	55
Arkansas	113,247	36	103,347	32
California	378,376	77	351,385	70
Colorado	142,852	15	132,206	14
Connecticut	0	0	0	0
Delaware	0	0	0	0
District of Columbia	0	0	0	0
Florida	259,622	44	101,963	7
Georgia	70,580	5	69,731	4
Hawaii	211,966	20	211,966	20
Idaho	212,171	22	153,385	21
Illinois	91,725	25	76,544	21
Indiana	26,375	8	24,857	7
Iowa	186,674	41	146,264	36
Kansas	377,833	62	343,413	56
Kentucky	477,586	207	457,856	198
Louisiana	6,501	3	6,501	3
Maine	83,600	9	23,108	5
Maryland	0	0	0	0
Massachusetts	0	0	0	0
Michigan	570,029	50	518,918	46
Minnesota	1,006,345	102	865,528	95
Mississippi	113,354	14	111,454	11
Missouri	111,082	27	100,956	25
Montana	551,206	61	503,664	58
Nebraska	615,389	33	607,192	32
Nevada	66,767	18	57,757	15
New Hampshire	0	0	0	0
New Jersey	0	0	0	0
New Mexico	317,874	50	221,996	31
New York	14,252	3	13,651	2
North Carolina	149,423	16	146,147	16
North Dakota	460,135	58	440,865	58
Ohio	142,734	8	99,302	8
Oklahoma	106,114	35	97,233	30
Oregon	21,586	9	21,586	9
Pennsylvania	47,646	13	35,291	12
Rhode Island	0	0	0	0
South Carolina	7,323	3	6,355	2
South Dakota	421,819	49	398,292	45
Tennessee	31,717	14	26,166	12
Texas	139,929	28	130,034	25
Utah	687,450	28	646,542	27
Vermont	1,265	3	1,265	3
Virgin Islands	115,575	9	113,637	8
Virginia	166,495	28	166,464	28
Washington	68,592	28	63,336	25
West Virginia	123,204	29	87,577	19
Wisconsin	987,303	92	915,723	90
Wyoming	155,530	12	130,202	11
<b>Totals</b>	<b>\$27,932,628</b>	<b>1,663</b>	<b>\$24,605,376</b>	<b>1,451</b>

Note: Disbursements through June 30, 2006. Because of the appeals process, funding commitments and disbursements may be made after the program year ended.

Source: USAC data. Rollups performed by the Industry Analysis and Technology Division, Wireline Competition Bureau, FCC.

**Table 5.2**  
**Rural Health Care Funding Commitments and Disbursements by State**

**Funding Year 2004: July 1, 2004 through June 30, 2005**

State	Total Funds Committed	Providers Receiving Support	Total Funds Disbursed	Providers Receiving Support
Alabama	\$18,693	5	\$16,608	4
Alaska	20,547,595	229	15,097,072	162
Arizona	1,207,764	73	628,858	55
Arkansas	163,213	34	100,445	27
California	564,724	76	340,384	36
Colorado	155,686	16	122,289	14
Connecticut	0	0	0	0
Delaware	0	0	0	0
District of Columbia	0	0	0	0
Florida	351,825	53	163,022	9
Georgia	216,861	21	194,413	15
Hawaii	305,536	21	242,690	19
Idaho	136,905	28	73,940	20
Illinois	597,529	68	394,696	45
Indiana	175,949	9	123,495	7
Iowa	218,683	53	175,606	42
Kansas	547,607	73	237,389	25
Kentucky	919,990	202	836,017	192
Louisiana	7,536	6	4,700	2
Maine	42,258	11	31,450	6
Maryland	0	0	0	0
Massachusetts	1,638	1	0	0
Michigan	835,089	75	532,569	52
Minnesota	1,031,874	140	857,430	116
Mississippi	175,424	25	129,477	8
Missouri	124,185	29	85,329	15
Montana	582,426	62	494,145	52
Nebraska	857,484	76	734,167	66
Nevada	64,099	10	0	0
New Hampshire	5,388	2	2,483	1
New Jersey	0	0	0	0
New Mexico	276,523	55	107,972	10
New York	41,782	8	7,274	1
North Carolina	199,975	22	129,854	11
North Dakota	577,294	89	484,338	70
Ohio	196,045	10	93,072	6
Oklahoma	168,105	35	69,508	5
Oregon	40,054	11	18,994	2
Pennsylvania	80,716	17	51,293	10
Rhode Island	0	0	0	0
South Carolina	45,433	11	38,528	9
South Dakota	574,325	76	443,024	55
Tennessee	97,352	29	52,874	5
Texas	451,913	37	6,669	3
Utah	661,538	36	558,595	28
Vermont	35,336	9	27,973	8
Virgin Islands	113,841	12	104,232	12
Virginia	364,973	50	307,182	39
Washington	88,533	31	44,713	8
West Virginia	131,324	20	68,750	12
Wisconsin	1,459,699	170	1,158,130	132
Wyoming	109,001	9	99,776	7
<b>Totals</b>	<b>\$35,569,725</b>	<b>2,135</b>	<b>\$25,491,422</b>	<b>1,423</b>

Note: Disbursements through June 30, 2006. Because of the appeals process, funding commitments and disbursements may be made after the program year ended.

Source: USAC data. Rollups performed by the Industry Analysis and Technology Division, Wireline Competition Bureau, FCC.



**Table 5.2**  
**Rural Health Care Funding Commitments and Disbursements by State**

**Funding Year 2005: July 1, 2005 through June 30, 2006**

State	Total Funds Committed	Providers Receiving Commitments	Total Funds Disbursed	Providers Receiving Support
Alabama	\$62,401	19	\$35,319	10
Alaska	11,273,201	147	3,970,024	56
Arizona	942,121	49	387,458	12
Arkansas	59,698	12	788	3
California	224,644	28	92,911	9
Colorado	22,310	5	301	1
Connecticut	0	0	0	0
Delaware	0	0	0	0
District of Columbia	0	0	0	0
Florida	59,645	2	0	0
Georgia	264,698	32	122,741	9
Hawaii	217,524	19	148,277	14
Idaho	84,860	21	42,500	13
Illinois	405,990	34	70,297	7
Indiana	133,767	7	69,014	3
Iowa	168,619	29	102,806	14
Kansas	438,507	66	98,261	12
Kentucky	110,665	46	27,926	12
Louisiana	207,635	24	88,396	10
Maine	11,476	10	0	0
Maryland	0	0	0	0
Massachusetts	35,487	2	0	0
Michigan	291,103	30	22,853	4
Minnesota	898,465	96	294,583	38
Mississippi	181,496	11	31,208	5
Missouri	84,619	17	5,094	8
Montana	255,523	27	22,225	4
Nebraska	1,396,985	79	749,046	50
Nevada	0	0	0	0
New Hampshire	4,816	1	0	0
New Jersey	0	0	0	0
New Mexico	277,405	32	22,857	2
New York	25,204	8	12,419	1
North Carolina	7,041	2	2,934	1
North Dakota	561,777	71	234,615	40
Ohio	80,087	2	17,930	1
Oklahoma	82,927	5	0	0
Oregon	0	0	0	0
Pennsylvania	47,805	5	0	0
Rhode Island	0	0	0	0
South Carolina	55,102	12	31,268	8
South Dakota	783,607	46	555,802	38
Tennessee	106,077	13	3,064	3
Texas	637,711	46	2,475	1
Utah	246,459	22	233,466	18
Vermont	78,704	12	65,688	11
Virgin Islands	79,786	10	498	1
Virginia	129,983	24	24,540	5
Washington	29,646	10	11,232	4
West Virginia	45,281	12	0	0
Wisconsin	1,447,543	118	155,063	16
Wyoming	42,354	4	0	0
<b>Totals</b>	<b>\$22,600,754</b>	<b>1,267</b>	<b>\$7,755,878</b>	<b>444</b>

Note: Disbursements through June 30, 2006. Because of the appeals process, funding commitments and disbursements may be made after the program year ended.

Source: USAC data. Rollups performed by the Industry Analysis and Technology Division, Wireline Competition Bureau, FCC.

**Table 5.3**  
**Disbursements by Service Speeds Acquired by Rural Health Care Providers**  
**Funding Year 2003: July 1, 2003 through June 30, 2004**

State	Voice Grade	Broadband		Other Service or Speed Unknown	Total
	56K to 199K	200K to 1.49Mb	1.5Mb and faster		
Alabama	\$0	\$2,146	\$26,591	\$0	\$28,736
Alaska	22,766	8,838,145	6,199,594	0	15,060,505
Arizona	0	120,169	666,308	0	786,478
Arkansas	0	31,001	72,346	0	103,347
California	176,002	84,707	90,676	0	351,385
Colorado	15,114	9,476	106,578	1,037	132,206
Connecticut	0	0	0	0	0
Delaware	0	0	0	0	0
District of Columbia	0	0	0	0	0
Florida	0	5,225	96,737	0	101,963
Georgia	0	0	69,731	0	69,731
Hawaii	0	0	211,966	0	211,966
Idaho	0	90,534	62,852	0	153,385
Illinois	0	25,359	51,185	0	76,544
Indiana	0	2,859	21,998	0	24,857
Iowa	0	41,456	104,808	0	146,264
Kansas	26,207	225,069	92,136	0	343,413
Kentucky	1,795	222,255	233,805	0	457,856
Louisiana	0	5,303	1,198	0	6,501
Maine	21,529	1,580	0	0	23,108
Maryland	0	0	0	0	0
Massachusetts	0	0	0	0	0
Michigan	6,301	18,993	493,625	0	518,918
Minnesota	6,133	220,774	638,621	0	865,528
Mississippi	0	17,961	93,493	0	111,454
Missouri	0	50,151	50,805	0	100,956
Montana	0	9,356	494,308	0	503,664
Nebraska	22,517	79,245	505,430	0	607,192
Nevada	0	23,486	34,271	0	57,757
New Hampshire	0	0	0	0	0
New Jersey	0	0	0	0	0
New Mexico	0	138,212	83,784	0	221,996
New York	1,975	0	11,676	0	13,651
North Carolina	0	13,296	132,851	0	146,147
North Dakota	12,054	63,947	364,864	0	440,865
Ohio	179	1,332	97,791	0	99,302
Oklahoma	956	70,959	25,318	0	97,233
Oregon	0	18,434	3,152	0	21,586
Pennsylvania	2,669	35	32,587	0	35,291
Rhode Island	0	0	0	0	0
South Carolina	4,320	0	2,035	0	6,355
South Dakota	5,435	102,848	290,009	0	398,292
Tennessee	5,547	0	20,619	0	26,166
Texas	2,560	40,340	87,135	0	130,034
Utah	0	118,862	527,679	0	646,542
Vermont	0	1,265	0	0	1,265
Virgin Islands	0	0	113,637	0	113,637
Virginia	0	4,319	162,145	0	166,464
Washington	0	13,414	49,922	0	63,336
West Virginia	0	47,661	39,915	0	87,577
Wisconsin	140,592	203,731	564,877	6,521	915,723
Wyoming	0	63,338	66,864	0	130,202
Totals	\$474,651	\$11,027,242	\$13,095,924	\$7,559	\$24,605,376

Note: Disbursements through June 30, 2006. Because of the appeals process, funding commitments and disbursements may be made after the program year ended.

Source: USAC data. Rollups performed by the Industry Analysis and Technology Division, Wireline Competition Bureau, FCC.

**Table 5.3**  
**Disbursements by Service Speeds Acquired by Rural Health Care Providers**  
**Funding Year 2004: July 1, 2004 through June 30, 2005**

State	Voice Grade	Broadband		Other Service or Speed Unknown	Total
	56K to 199K	200K to 1.49Mb	1.5Mb and faster		
Alabama	\$0	\$724	\$15,883	\$0	\$16,608
Alaska	1,325	8,689,366	6,362,388	43,993	15,097,072
Arizona	0	90,905	529,703	8,249	628,858
Arkansas	3,160	20,166	73,303	3,817	100,445
California	170,734	10,467	154,687	4,495	340,384
Colorado	16,168	0	105,280	841	122,289
Connecticut	0	0	0	0	0
Delaware	0	0	0	0	0
District of Columbia	0	0	0	0	0
Florida	0	4,380	158,642	0	163,022
Georgia	0	30,150	160,953	3,310	194,413
Hawaii	0	0	236,103	6,586	242,690
Idaho	0	26,402	43,221	4,317	73,940
Illinois	0	14,624	346,125	33,947	394,696
Indiana	0	0	123,495	0	123,495
Iowa	22,266	21,800	125,639	5,900	175,606
Kansas	23,000	19,685	189,453	5,251	237,389
Kentucky	0	244,245	493,620	98,152	836,017
Louisiana	0	0	4,700	0	4,700
Maine	21,565	6,189	2,802	894	31,450
Maryland	0	0	0	0	0
Massachusetts	0	0	0	0	0
Michigan	5,741	21,479	482,713	22,636	532,569
Minnesota	2,952	109,302	690,741	54,435	857,430
Mississippi	0	3,980	124,830	667	129,477
Missouri	0	6,768	70,141	8,419	85,329
Montana	0	33,072	459,794	1,279	494,145
Nebraska	0	45,704	673,568	14,895	734,167
Nevada	0	0	0	0	0
New Hampshire	0	0	2,483	0	2,483
New Jersey	0	0	0	0	0
New Mexico	0	41,346	64,379	2,248	107,972
New York	1,975	0	4,099	1,200	7,274
North Carolina	0	3,707	124,543	1,604	129,854
North Dakota	10,715	191,236	276,123	6,264	484,338
Ohio	0	0	73,512	19,560	93,072
Oklahoma	0	58,868	10,640	0	69,508
Oregon	0	0	18,994	0	18,994
Pennsylvania	5,237	147	35,746	10,163	51,293
Rhode Island	0	0	0	0	0
South Carolina	0	23,990	14,538	0	38,528
South Dakota	4,859	27,827	409,676	662	443,024
Tennessee	0	37,029	14,905	940	52,874
Texas	0	0	4,574	2,095	6,669
Utah	0	120,497	437,576	522	558,595
Vermont	0	6,377	13,492	8,104	27,973
Virgin Islands	1,987	0	94,481	7,763	104,232
Virginia	0	118,384	186,915	1,882	307,182
Washington	0	0	43,113	1,600	44,713
West Virginia	4,095	12,457	51,243	955	68,750
Wisconsin	233,991	134,348	706,395	83,396	1,158,130
Wyoming	0	39,852	59,214	711	99,776
Totals	\$529,770	\$10,215,472	\$14,274,426	\$471,754	\$25,491,422

Note: Disbursements through June 30, 2006. Because of the appeals process, funding commitments and disbursements may be made after the program year ended.

Source: USAC data. Rollups performed by the Industry Analysis and Technology Division, Wireline Competition Bureau, FCC.

**Table 5.3**  
**Disbursements by Service Speeds Acquired by Rural Health Care Providers**  
**Funding Year 2005: July 1, 2005 through June 30, 2006**

State	Voice Grade	Broadband		Other Service or Speed Unknown	Total
	56K to 199K	200K to 1.49Mb	1.5Mb and faster		
Alabama	\$0	\$0	\$0	\$35,319	\$35,319
Alaska	0	3,048,695	889,586	31,743	3,970,024
Arizona	0	0	380,411	7,047	387,458
Arkansas	0	0	0	788	788
California	0	0	91,859	1,052	92,911
Colorado	0	0	0	301	301
Connecticut	0	0	0	0	0
Delaware	0	0	0	0	0
District of Columbia	0	0	0	0	0
Florida	0	0	0	0	0
Georgia	0	0	122,741	0	122,741
Hawaii	0	0	144,824	3,454	148,277
Idaho	0	10,732	29,136	2,633	42,500
Illinois	0	0	66,015	4,283	70,297
Indiana	0	0	69,014	0	69,014
Iowa	0	0	97,960	4,846	102,806
Kansas	3,300	0	92,747	2,214	98,261
Kentucky	0	317	27,609	0	27,926
Louisiana	0	0	0	88,396	88,396
Maine	0	0	0	0	0
Maryland	0	0	0	0	0
Massachusetts	0	0	0	0	0
Michigan	0	0	21,206	1,647	22,853
Minnesota	0	24,311	266,878	3,394	294,583
Mississippi	0	0	28,930	2,278	31,208
Missouri	0	0	0	5,094	5,094
Montana	0	0	22,225	0	22,225
Nebraska	0	22,160	722,540	4,347	749,046
Nevada	0	0	0	0	0
New Hampshire	0	0	0	0	0
New Jersey	0	0	0	0	0
New Mexico	0	4,164	18,348	345	22,857
New York	4,354	0	7,988	78	12,419
North Carolina	0	0	2,934	0	2,934
North Dakota	970	95,258	138,143	244	234,615
Ohio	0	0	0	17,930	17,930
Oklahoma	0	0	0	0	0
Oregon	0	0	0	0	0
Pennsylvania	0	0	0	0	0
Rhode Island	0	0	0	0	0
South Carolina	0	13,959	15,753	1,556	31,268
South Dakota	0	3,597	552,026	180	555,802
Tennessee	0	0	0	3,064	3,064
Texas	0	0	0	2,475	2,475
Utah	0	112,153	121,313	0	233,466
Vermont	0	13,662	45,794	6,232	65,688
Virgin Islands	0	0	0	498	498
Virginia	0	0	22,890	1,650	24,540
Washington	0	0	11,232	0	11,232
West Virginia	0	0	0	0	0
Wisconsin	9,752	32,781	111,211	1,320	155,063
Wyoming	0	0	0	0	0
Totals	\$18,375	\$3,381,790	\$4,121,309	\$234,404	\$7,755,878

Note: Disbursements through June 30, 2006. Because of the appeals process, funding commitments and disbursements may be made after the program year ended.

Source: USAC data. Rollups performed by the Industry Analysis and Technology Division, Wireline Competition Bureau, FCC.

**Table 5.4**  
**Disbursements per Person for Rural Health Care Support Mechanism, by State**  
**Values in Thousands, Except Disbursements per Person in Rural Areas**

**Funding Year 2003: July 1, 2003 through June 30, 2004**

State or Jurisdiction	USAC Disbursements on Behalf of Rural Health Care Providers	Population in Rural Areas <sup>1</sup>	Disbursements Per Person in Rural Areas
Alabama	\$29	1,407	\$0.020
Alaska	15,061	367	41.076
American Samoa	0	57	0.000
Arizona	786	954	0.825
Arkansas	103	1,435	0.072
California	351	2,521	0.139
Colorado	132	777	0.170
Connecticut	0	334	0.000
Delaware	0	157	0.000
District of Columbia	0	0	NA
Florida	102	1,427	0.071
Georgia	70	2,520	0.028
Guam	0	155	0.000
Hawaii	212	335	0.632
Idaho	153	862	0.178
Illinois	77	1,878	0.041
Indiana	25	1,691	0.015
Iowa	146	1,600	0.091
Kansas	343	1,193	0.288
Kentucky	458	2,069	0.221
Louisiana	7	1,111	0.006
Maine	23	854	0.027
Maryland	0	385	0.000
Massachusetts	0	335	0.000
Michigan	519	1,769	0.293
Minnesota	866	1,594	0.543
Mississippi	111	1,821	0.061
Missouri	101	1,799	0.056
Montana	504	705	0.715
Nebraska	607	811	0.748
Nevada	58	305	0.189
New Hampshire	0	380	0.000
New Jersey	0	0	NA
New Mexico	222	856	0.259
New York	14	1,537	0.009
North Carolina	146	2,612	0.056
North Dakota	441	367	1.200
Northern Mariana Islands	0	69	0.000
Ohio	99	2,139	0.046
Oklahoma	97	1,378	0.071
Oregon	22	977	0.022
Pennsylvania	35	1,893	0.019
Puerto Rico	0	3,859	0.000
Rhode Island	0	55	0.000
South Carolina	6	1,205	0.005
South Dakota	398	503	0.792
Tennessee	26	1,827	0.014
Texas	130	3,280	0.040
Utah	647	531	1.218
Vermont	1	448	0.003
Virgin Islands	114	109	1.043
Virginia	166	1,503	0.111
Washington	63	1,136	0.056
West Virginia	88	1,043	0.084
Wisconsin	916	1,757	0.521
Wyoming	130	354	0.368
<b>Totals</b>	<b>\$24,605</b>	<b>58,795</b>	<b>\$0.418</b>

Note: Disbursements through June 30, 2006. Because of the appeals process, funding commitments and disbursements may be made after the program year ended.

<sup>1</sup> Population in entirely rural counties as of April 1, 2000 from the Census Bureau. Some commitments were allowed in non-rural counties in areas affected by the Goldsmith Modification. See 47 C.F.R. § 54.5. For those counties, the 2000 rural population has been estimated.

Source: USAC data. Rollups performed by the Industry Analysis and Technology Division, Wireline Competition Bureau, FCC.

**Table 5.4**  
**Disbursements per Person for Rural Health Care Support Mechanism, by State**  
**Values in Thousands, Except Disbursements per Person in Rural Areas**

*Funding Year 2004: July 1, 2004 through June 30, 2005*

State or Jurisdiction	USAC Disbursements on Behalf of Rural Health Care Providers	Population in Rural Areas <sup>1</sup>	Disbursements Per Person in Rural Areas
Alabama	\$17	1,407	\$0.012
Alaska	15,097	367	41.176
American Samoa	0	57	0.000
Arizona	629	954	0.659
Arkansas	100	1,435	0.070
California	340	2,521	0.135
Colorado	122	777	0.157
Connecticut	0	334	0.000
Delaware	0	157	0.000
District of Columbia	0	0	NA
Florida	163	1,427	0.114
Georgia	194	2,520	0.077
Guam	0	155	0.000
Hawaii	243	335	0.724
Idaho	74	862	0.086
Illinois	395	1,878	0.210
Indiana	123	1,691	0.073
Iowa	176	1,600	0.110
Kansas	237	1,193	0.199
Kentucky	836	2,069	0.404
Louisiana	5	1,111	0.004
Maine	31	854	0.037
Maryland	0	385	0.000
Massachusetts	0	335	0.000
Michigan	533	1,769	0.301
Minnesota	857	1,594	0.538
Mississippi	129	1,821	0.071
Missouri	85	1,799	0.047
Montana	494	705	0.701
Nebraska	734	811	0.905
Nevada	0	305	0.000
New Hampshire	2	380	0.007
New Jersey	0	0	NA
New Mexico	108	856	0.126
New York	7	1,537	0.005
North Carolina	130	2,612	0.050
North Dakota	484	367	1.318
Northern Mariana Islands	0	69	0.000
Ohio	93	2,139	0.044
Oklahoma	70	1,378	0.050
Oregon	19	977	0.019
Pennsylvania	51	1,893	0.027
Puerto Rico	0	3,859	0.000
Rhode Island	0	55	0.000
South Carolina	39	1,205	0.032
South Dakota	443	503	0.881
Tennessee	53	1,827	0.029
Texas	7	3,280	0.002
Utah	559	531	1.053
Vermont	28	448	0.062
Virgin Islands	104	109	0.956
Virginia	307	1,503	0.204
Washington	45	1,136	0.039
West Virginia	69	1,043	0.066
Wisconsin	1,158	1,757	0.659
Wyoming	100	354	0.282
<b>Totals</b>	<b>\$25,491</b>	<b>58,795</b>	<b>\$0.434</b>

Note: Disbursements through June 30, 2006. Because of the appeals process, funding commitments and disbursements may be made after the program year ended.

<sup>1</sup> Population in entirely rural counties as of April 1, 2000 from the Census Bureau. Some commitments were allowed in non-rural counties in areas affected by the Goldsmith Modification. See 47 C.F.R. § 54.5. For those counties, the 2000 rural population has been estimated.

Source: USAC data. Rollups performed by the Industry Analysis and Technology Division, Wireline Competition Bureau, FCC.

## 6. Subscribership and Penetration

The number and percentage of households that have telephone service represent the most fundamental measures of the extent of universal service. Continuing analysis of telephone penetration statistics allows us to examine the aggregate effects of Commission actions on households' decisions to maintain, acquire or drop telephone service. This section presents comprehensive data on telephone penetration statistics from the Current Population Survey (CPS) collected by the Bureau of the Census under contract with the Federal Communications Commission.<sup>1</sup> Along with telephone penetration statistics for the United States and each of the states from November 1983 to March 2006, data are provided on penetration based on various demographic characteristics. This section also presents historical data from the decennial census and the American Community Survey (ACS) collected by the Bureau of the Census. This section also updates information on telephone penetration by income by state.<sup>2</sup> This information is designed to help evaluate the degree of success of making telephone service available to low-income households in each state.

The most widely used measure of telephone subscribership is the percentage of households with telephone service, sometimes called a measure of telephone penetration. Prior to 1980, precise measurements of telephone subscribership received little attention. Historical estimates of telephone penetration were based on a comparison of the number of residential main stations to the number of households or housing units. Measures of penetration based on the number of residential lines, however, became subject to a large margin of error as more and more households added second telephone lines and more consumers acquired second homes. By 1980, the traditional measure of penetration (residential lines divided by the number of households) reached 96%, while the proportion of households reporting that they had telephones in the 1980 census was 92.9%.

Recognizing the need for more precise periodic measurements of subscribership, the Commission requested that the Census Bureau include questions on telephone availability as part of its CPS, which monitors demographic trends between the decennial censuses. This survey is a staggered panel survey in which the people residing at particular addresses are included in the survey for four consecutive months in one year and the same four months in the following year.

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1 This information was included in Industry Analysis and Technology Division, Wireline Competition Bureau, Federal Communications Commission, *Telephone Subscribership in the United States* (May 12, 2006). That report is updated three times a year.

2 This information was included in Industry Analysis and Technology Division, Wireline Competition Bureau, Federal Communications Commission, *Telephone Penetration by Income by State* (May 12, 2006). That report contains information on the number of households in each state as well as the percentages reported here. However, the percentages reported here may differ slightly from those in that report because this report reflects changes in the weights of individual household observations that were released by the CPS on August 29, 2006.

Use of the CPS has several advantages: it is conducted every month by an independent and expert agency; the sample is large; and the questions are consistent. Thus, changes in the results can be compared over time with a reasonable degree of confidence.

In the 1980 decennial census, the question "Do you have a telephone?" was added to the long-form questionnaire. The same question was used in 1990. With the telephone companies no longer owning the telephone instruments beginning in 1984, it is possible for someone to have a telephone but not have service. Therefore, the question was changed in 2000 to avoid the possible bias from having a phone but no service. In the 2000 decennial census, the question was changed to "Is there telephone service available in this [housing unit] from which you can both make and receive calls?" The question also allows for the possibility of the substitution of wireless service for wireline service. Beginning in 2001 the Census Bureau introduced the ACS, which was designed to replace the long form of the decennial census. Unfortunately, the results of the CPS cannot be directly compared with the penetration figures contained in the 1980, 1990, and 2000 decennial censuses or the ACS. This is due to differences in sampling techniques and survey methodologies, and because of differences in the context in which the questions were asked. Also, the CPS uses households as the basis of measurement, while the decennial census and the ACS use occupied housing units instead. For example, the 2000 decennial census reported 97.6% of all occupied housing units in the United States had telephone service available, whereas the CPS data showed a penetration rate of 94.6% of households for March 2000. This difference is statistically significant and appears to indicate that the CPS value may be on the low side and the decennial census value may be on the high side, with the most probable value lying somewhere in between.

The decennial census data have the advantage of using much larger samples than the CPS because they are based on a sample of one-in-six households that filled out the Census Bureau's long form. This makes it possible to look at long-run trends for small minority groups. For example, statistics from the 2000 census estimated that 67.9% of all American Indian households living on federally recognized reservations and trust lands had telephone service, as compared with 46.6% estimated from the 1990 census.<sup>3</sup>

The specific questions asked in the CPS are: "Does this house, apartment, or mobile home have telephone service from which you can both make and receive calls? Please include cell phones, regular phones, and any other type of telephone."<sup>4</sup> And, if the answer to the first question

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3 For more information, see the report Industry Analysis and Technology Division, Wireline Competition Bureau, Federal Communications Commission, *Telephone Subscribership on American Indian Reservations and Off-Reservation Trust Lands* (May 5, 2003).

4 The questions are intended to be neutral as to whether the household has wireline or wireless phones. Through November 2004, this question had been worded: "Is there a telephone in this house/apartment?" Because of the increasing number of households that have wireless only, there was some concern that some of these households may not think of their cell phones when asked if they have a telephone. Consequently, beginning in



is "no," this is followed up with, "Is there a telephone elsewhere on which people in this household can be called?" If the answer to the first question is "yes," the household is counted as having a telephone "in unit." If the answer to either the first or second question is "yes," the household is counted as having a telephone "available." The "in unit" data and the "available" data are reported in Tables 6.9 through 6.13 and 6.15 through 6.19, and Charts 6.1 and 6.8. All of the remaining tables and charts of this section just report the "in unit" data.

Although the survey is conducted every month, not all questions are asked every month. The telephone questions are asked once every four months: in the month that a household is first included in the sample and in the month that the household reenters the sample a year later. Since the sample is staggered, the reported information for any given month actually reflects responses over the preceding four months. Aggregated summaries of the responses are reported to the Commission, based on the surveys conducted through March, July, and November of each year. The CPS later provides the Commission with the raw data files containing all of the responses to all of the questions on the CPS questionnaires in those months.<sup>5</sup>

The CPS data are based on a nationwide sample of about 50 to 60 thousand households in the 50 states and the District of Columbia. (The CPS does not cover outlying areas that are not states, such as Puerto Rico, Guam, American Samoa, the Virgin Islands, and the Northern Mariana Islands.) Because a sample is used, the estimates are subject to sampling error. For the nationwide totals, changes in telephone penetration between consecutive reports of less than 0.4% may be due to sampling error and cannot be regarded as statistically significant.<sup>6</sup> As explained below, when comparing the same month in two consecutive years, changes of less than or equal to 0.3% are not statistically significant. When comparing annual averages, changes of less than or equal to 0.2% are not statistically significant. The annual averages are the average of the three surveys of the year in question. For individual states or other subgroups of the U.S. population, the amount of sampling variability is much greater, because the sample sizes are smaller. This will require larger changes to yield statistical significance at the same confidence level.

The data in this section are not seasonally adjusted. After adjusting for the trend over time, there is an average increase of less than 0.2% among the reported months. All of the changes are below the threshold of statistical significance.

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December 2004, CPS changed its telephone question to the wording given above. It is possible that some of the drop in the penetration rate between November 2004 and March 2005 is for households who had a phone, but did not have service.

5 Tables 6.3 through 6.5, 6.11, and 6.17 of this section are derived from these raw data files.

6 The determination of the statistical significance of a change over time is discussed below. The critical value is dependent on the sizes of the samples from which the change is computed and by the confidence level, which is 95% here.

Once a year, in March, the CPS supplements its survey with additional questions, which include detailed information about income, and augments its sample with about 2,500 additional Hispanic households. Starting in 2001, the sample was further augmented with about 20,000 additional households with children.<sup>7</sup> The more detailed information from the March surveys makes it possible to adjust the income categories for inflation, and therefore make the purchasing power within each category stable over time. In the July and November surveys, only broad income categories are reported. (These are the categories that appear in Table 6.8.)

The Commission's Lifeline support mechanism was instituted in 1985 to help low-income households afford the monthly cost of telephone service. Under the federal Lifeline support mechanism, telephone companies offer reduced rates to qualifying households and receive reimbursement from the federal universal service support mechanisms. Initially, Lifeline was available only in those states that chose to participate by providing matching assistance.

Effective in 1998, the federal Lifeline support mechanism was revised so that a basic level of assistance would be provided in all states.<sup>8</sup> Additional federal support is also provided wherever a state chooses to provide matching assistance, at a rate of \$1 in federal support for each \$2 of state matching support, up to a maximum of \$1.75 federal support (corresponding to \$3.50 of state matching support). States may provide further support without further matching federal assistance.

## **Results and Statistical Analysis**

Census Bureau figures for March 2006 show that the percentage of households subscribing to telephone service is 92.8%. This figure is up 0.4% from March 2004. This increase is statistically significant. The average penetration rate for the year 2005 was 93.1%, which is down 0.7% from the 2004 average. This decrease is also statistically significant.

This section includes figures showing subscribership percentages by state, by the head of the household's age and race, by household size, by income, and for adult individuals by labor force status. The March 2006 data show that 93.7% of adult individuals in the civilian non-institutionalized population have a telephone in their household. This is up 0.5% from March 2005. This increase is statistically significant. The average penetration rate for 2004 was 93.8% for adult individuals, which is down 0.9% from the 2003 average. This decrease is also statistically significant.

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7 The responses from the additional Hispanic households and households with children are not included in Tables 6.1, 6.3, and 6.7 through 6.11. Thus, in some cases, there may be small discrepancies between the percentages in those tables and the percentages in Tables 6.4 through 6.6 and 6.12.

8 The basic federal Lifeline support level is the subscriber line charge plus \$1.75 per line per month. Eligible subscribers living on tribal lands may receive up to \$25 additional Lifeline support as needed to bring their monthly rate down to \$1.

This section contains twenty tables and nine charts presenting penetration statistics for various geographic and demographic characteristics. The charts and the first eight tables present summaries of the available information. Tables 6.9 through 6.14 present more detailed information. In Tables 6.9 through 6.13, only the annual averages are included for the years 1984 through 2003. March, July, and November data for those years are available in previous Monitoring Reports in CC Docket Nos. 87-339 or 98-202. Tables 6.15 through 6.20 provide information necessary to determine the statistical significance of changes in the penetration rates over time.

Table 6.1 summarizes the CPS telephone penetration data for the United States, combining information on the number of households with the penetration rates.

Chart 6.1 graphically depicts the nationwide penetration rates for households over time using annual average CPS data.

Table 6.2 shows the historical estimates for the United States based on AT&T data through 1970, the decennial censuses for 1980 through 2000, and the ACS for 2001 through 2004.

Further information from the ACS is shown in Tables 6.3 and 6.4. Table 6.3 shows characteristics including housing unit tenure, age of the householder, and race and ethnicity of the householder and Table 6.4 shows state data.

Table 6.5 summarizes the CPS telephone penetration rates by state, showing the average rates for 1984 and 2005, the change between those two years, and an indication as to whether the change is statistically significant. The statistical significance of a change is determined not only by the magnitude of that change, but also by the sizes of the samples used to estimate the change.

Chart 6.2 depicts the states with average 2005 penetration rates (as shown in Table 6.5) more than 1% below the national average, within 1% of the national average, or more than 1% above the national average.

Chart 6.3 depicts changes in household penetration rates by state (as shown in Table 6.5) between the average 1984 and 2005 rates. States with statistically significant increases or decreases are shown, along with other states with increases or decreases.

Chart 6.4 depicts the relationship between telephone penetration and household income, using average 2005 penetration rates for all households and for households headed by white, black, and Hispanic persons.<sup>9</sup> It is based on data in Table 6.10.

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9 The CPS includes three racial categories: white, black, and other. Others, which include Native Americans, Asians, and Pacific Islanders, are not reported separately because of small sample sizes, but they are included in the totals. Hispanics are reported as an ethnic group, and can be of any race.

Chart 6.5 depicts the relationship between telephone penetration and household size, using average 2005 penetration rates for all households and for households headed by white, black, and Hispanic persons. It is based on data in Table 6.11.

Chart 6.6 depicts the relationship between telephone penetration and the head of the household's age, using average 2005 penetration rates for all households and for households headed by white, black, and Hispanic persons. It is based on data in Table 6.12.

Chart 6.7 depicts the relationship between telephone penetration and labor force status for civilian non-institutionalized adults, using average 2005 penetration rates for all adults and for white, black, and Hispanic adults. It is based on data in Table 6.13.

Chart 6.8 graphically depicts the nationwide penetration rates for civilian non-institutionalized adults over time using annual average data. It is also based on data in Table 6.13.

Chart 6.9 shows the telephone penetration rates in March of each year through 2005 for each of five income categories, adjusted for inflation, for the entire United States. It is based on data in Table 6.14. The income categories (expressed in March 1984 dollars) are: \$9,999 or less; \$10,000 - \$19,999; \$20,000 - \$29,999; \$30,000 - \$39,999; and \$40,000 or more. These categories were chosen because they are of approximately equal size, both in terms of income ranges and the number of households in each category. The upper limit of the lowest category is also approximately equal to the federal poverty line for a family of four. Between 1984 and 2005, there was a statistically significant increase in the penetration rate for all households. There also was a statistically significant increase in penetration rates in the lowest income category over this time period.<sup>10</sup> For the next to lowest income category, there was a small and not significant increase from 1984 to 2005. For the three highest income categories there were significant decreases in the penetration rate between 1984 and 2005. Not all of the increases in the national total penetration rate can be explained by increases in real income, because real income increases are reflected in the movement of households between categories. Thus, penetration changes within each income category represent changes holding real income constant.

To help evaluate the effect of the federal Lifeline support mechanism, Table 6.6 focuses on changes in telephone penetration rates from just before the program was established to just before it was substantially expanded in 1998, by comparing penetration rates for states with and without state Lifeline programs prior to 1998.<sup>11</sup> Briefly, penetration rate increases were greater,

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10 See footnote 16 for the critical values for these significance tests.

11 The expanded program was adopted in 1997, and took effect on January 1, 1998. States with Lifeline programs prior to 1998 are identified in Table 6.8 by showing that the year that Lifeline began was before 1998. Prior to the expansion, states participating in the federal Lifeline program were required to match the federal support with their own state

on average, in states with Lifeline programs than in states without Lifeline programs.<sup>12</sup> The effect is especially apparent for low-income households,<sup>13</sup> which are the households primarily affected by the federal and state Lifeline programs. Between March 1984 and March 1997, the increase in the average penetration rate in states with Lifeline programs was 6.5% for low-income households. During this period, the increase in subscribership among low-income households in those states that adopted Lifeline programs was double that of states that did not adopt such programs, although there may have been other factors besides Lifeline that contributed to this result.

Information on all households is also included in Table 6.6. Overall penetration rates are more generally available and more commonly cited as measures of penetration than are rates only for low-income households. Penetration rate increases were again greater, on average, in states that established Lifeline programs. The increase for states with Lifeline programs was statistically significant,<sup>14</sup> but the increase for states without state Lifeline programs was not. States that adopted Lifeline programs before 1998 generally had lower penetration rates in 1984 than those that did not adopt such programs. By 1997, the difference in the penetration rates for the two groups diminished significantly.

Table 6.7 focuses on the change in penetration rates between March 1997 (before the expansion of the federal Lifeline program) and March 2005. The states are divided into three groups:

- “Full or High Assistance” states providing at least \$2 of state support to get federal matching support of at least \$1 per line per month;
- “Intermediate Assistance” states providing between \$1 and \$2 of state support, and receiving between \$0.50 and \$1 federal matching support per line per month;
- “Basic or Low Assistance” states providing less than \$1 of state support, and receiving less than \$0.50 federal matching support per line per month.

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support.

- 12 The averages for the groups of states were computed as weighted averages of the states in the groups, using the total number of households in each state as weights. This was calculated as the total number of households with telephone service in each group of states divided by the total number of households in that group.
- 13 Low-income households are those with incomes under \$10,000 expressed in 1984 dollars, which is equivalent to \$18,840 in 2005 dollars.
- 14 See the paragraph describing Tables 6.15 through 6.19 for a discussion of the determination of the statistical significance of a change over time. The critical value is dependent on the sizes of the samples from which the change is computed.

On average, for low-income households in those states where full or high assistance is provided, telephone penetration increased by 1.1%, between March 1997 and March 2005. This increase is statistically significant. In this group of states there was a statistically significant decrease of 1.0% in the overall penetration rate for all households. For states with intermediate assistance, there was an increase of 0.5% in the low-income penetration rate and a significant decrease of 2.0% in overall penetration. For states with basic or low assistance, the average penetration for low-income households decreased significantly by 2.4% and the average penetration for all households decreased significantly by 2.7%.

Data on individual states are provided in Table 6.8. The support amounts shown in Table 6.8 are the average state support plus federal matching support for all lifeline subscribers in March 2005. They do not include state support in excess of the \$3.50 limit that is eligible for federal matching support.<sup>15</sup> Thus, they range from zero to a maximum of \$5.25.

Table 6.9 shows the CPS penetration rates for the United States and for each state beginning with November 1983. Because the CPS began collecting this data only in 1983, comparable values are not available prior to November 1983. For each of the surveys, the column headed "Unit" indicates the percentage of households for which there is a telephone in the housing unit. The column headed "Avail." indicates the percentage of households which have telephone service available for incoming calls, either in the housing unit or elsewhere (such as at work or at a neighbor's home).

Table 6.10 shows the nationwide penetration rates for households by income and the race of the head of the household. It shows a strong relationship between income and penetration. Caution should be used in comparing these figures over time, because these income levels are not adjusted for inflation. Thus, the same nominal income level at two points in time will reflect different real incomes in terms of purchasing power. Also, the income categories have changed over time due to the changing value of the dollar. Consequently, when evaluating penetration changes by income levels over time, Table 6.14 should be used.

Table 6.11 shows the nationwide penetration rates for households by the size of the household and the race of the householder. It shows that penetration is higher for households of 2 to 5 people than it is for single-person households or those with 6 or more people.

Table 6.12 shows the nationwide penetration rates for households by the age and race of the head of the household. It shows that the penetration rate is lowest for young and non-white households.

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15 Any state support over \$3.50 per line is not matched by further federal support. The federal support includes half of the state support up to the \$3.50 limit. Thus the maximum federal matching support is \$1.75 per line per month.

Table 6.13 shows the nationwide penetration rates for all persons that are at least 15 years old in the civilian non-institutionalized population by their race and employment status. Since this table is for individual adults rather than households, the total penetration rates are different from those in the previous tables. It shows that penetration is lowest among the unemployed.

Table 6.14 shows the penetration rates for each of the income categories, adjusted for inflation, shown in Chart 6.9, for each state for March of each year. The table shows only five categories, rather than the more numerous categories of the nationwide data in Table 6.10, because the small sample sizes caused by a larger number of categories would result in unreliably large sampling variability for the individual states. The relative levels of the March Consumer Price Index for all items (as reported in Table 7.4) were used to make the inflation adjustment. Thus, for example, \$10,000 in March 1984 dollars had the same purchasing power as \$18,840 in March 2005 dollars. The precise current dollar values in each year are reported at the end of Table 6.14.

Tables 6.15 through 6.19 present the critical values at the 95% confidence level for testing the statistical significance of changes in penetration rates over time in the earlier tables. These critical values are relevant because changes less than or equal to the values shown are likely to be due to sampling error, and thus cannot be regarded as demonstrating that a change in telephone penetration has occurred. In some cases, these critical values are very large because the sample sizes are very small for these subcategories, rendering the changes in estimated penetration rates unreliable. Because there is an overlap of half of the sample from year to year, but no overlap in the sample between surveys that are four months apart, annual changes are less subject to variations in sampling error. Consequently, the critical values should be multiplied by 0.8 when making a comparison for the same month in two consecutive years. When comparing the annual averages, the critical values should be multiplied by 0.5774, since these averages are based on three surveys, and hence have a lower standard error. When comparing annual averages of two consecutive years, the critical values should be multiplied by .46, taking into account both of the above factors.

Table 6.20 shows the sample sizes on which the estimates of Table 6.14 are based. The sampling variability is inversely related to the square root of the sample size. The critical values for individual income categories in Table 6.14 can therefore be estimated by taking the critical value for the state "In Unit" total and multiplying it by the square root of the ratio of the sample size for the state total to the sample size for the income category. In most cases, the critical value for an individual income category will be between two and three times the critical value for the state total.<sup>16</sup> In some cases, these critical values are very large because the sample sizes are very small for these subcategories, thereby rendering the estimated penetration rates unreliable.

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16 For example, using this methodology to calculate critical values for comparing the 1984 and 2005 values for the United States Total, the critical values are 0.8% for the \$10,000 - \$19,999 and the \$40,000 or more categories, 0.9% for the \$9,999 or less and \$20,000 - \$29,999 categories, and 1.1% for the \$30,000 - \$39,999 category. These compare with 0.4% for all households.

**Table 6.1**  
**Household Telephone Subscribership in the United States**

Date	Households (millions)	Households with Telephones (millions)	Percentage with Telephones	Households without Telephones (millions)	Percentage without Telephones
November 1983	85.8	78.4	91.4%	7.4	8.6%
March 1984	86.0	78.9	91.8%	7.1	8.2%
July 1984	86.6	79.3	91.6%	7.3	8.4%
November 1984	87.4	79.9	91.4%	7.5	8.6%
March 1985	87.4	80.2	91.8%	7.2	8.2%
July 1985	88.2	81.0	91.8%	7.2	8.2%
November 1985	88.8	81.6	91.9%	7.2	8.1%
March 1986	89.0	82.1	92.2%	6.9	7.8%
July 1986	89.5	82.5	92.2%	7.0	7.8%
November 1986	89.9	83.1	92.4%	6.8	7.6%
March 1987	90.2	83.4	92.5%	6.8	7.5%
July 1987	90.7	83.7	92.3%	7.0	7.7%
November 1987	91.3	84.3	92.3%	7.0	7.7%
March 1988	91.8	85.3	92.9%	6.5	7.1%
July 1988	92.4	85.7	92.8%	6.7	7.2%
November 1988	92.6	85.7	92.5%	6.9	7.5%
March 1989	93.6	87.0	93.0%	6.6	7.0%
July 1989	93.8	87.5	93.3%	6.3	6.7%
November 1989	93.9	87.3	93.0%	6.6	7.0%
March 1990	94.2	87.9	93.3%	6.3	6.7%
July 1990	94.8	88.4	93.3%	6.4	6.7%
November 1990	94.7	88.4	93.3%	6.3	6.7%
March 1991	95.3	89.2	93.6%	6.1	6.4%
July 1991	95.5	89.1	93.3%	6.4	6.7%
November 1991	95.7	89.4	93.4%	6.3	6.6%
March 1992	96.6	90.7	93.9%	5.9	6.1%
July 1992	96.6	90.6	93.8%	6.0	6.2%
November 1992	97.0	91.0	93.8%	6.0	6.2%
March 1993	97.3	91.6	94.2%	5.7	5.8%
July 1993	97.9	92.2	94.2%	5.7	5.8%
November 1993	98.8	93.0	94.2%	5.8	5.8%
March 1994	98.1	92.1	93.9%	6.0	6.1%
July 1994	98.6	92.4	93.7%	6.2	6.3%
November 1994	99.8	93.7	93.8%	6.2	6.2%
March 1995	99.9	93.8	93.9%	6.1	6.1%
July 1995	100.0	94.0	94.0%	6.0	6.0%
November 1995	100.4	94.2	93.9%	6.2	6.1%
March 1996	100.6	94.4	93.8%	6.2	6.2%
July 1996	101.2	95.0	93.9%	6.1	6.1%
November 1996	101.3	95.1	93.9%	6.2	6.1%
March 1997	102.0	95.8	93.9%	6.2	6.1%
July 1997	102.3	96.1	93.9%	6.2	6.1%
November 1997	102.8	96.5	93.8%	6.3	6.2%
March 1998	103.4	97.4	94.1%	6.1	5.9%
July 1998	103.4	97.3	94.1%	6.1	5.9%
November 1998	104.1	98.0	94.2%	6.1	5.8%
March 1999	104.8	98.5	94.0%	6.3	6.0%
July 1999	105.1	99.2	94.4%	5.9	5.6%
November 1999	105.4	99.1	94.1%	6.3	5.9%
March 2000	105.3	99.6	94.6%	5.7	5.4%
July 2000	105.8	99.8	94.4%	5.9	5.6%
November 2000	106.5	100.2	94.1%	6.3	5.9%
March 2001	107.0	101.1	94.6%	5.8	5.4%
July 2001	106.9	101.7	95.1%	5.2	4.9%
November 2001	107.7	102.2	94.9%	5.5	5.1%
March 2002	108.3	103.4	95.5%	4.8	4.5%
July 2002	108.5	103.2	95.1%	5.3	4.9%
November 2002	109.0	104.0	95.3%	5.1	4.7%
March 2003	112.1	107.1	95.5%	5.0	4.5%
July 2003	112.1	106.8	95.2%	5.3	4.8%
November 2003	113.1	107.1	94.7%	6.0	5.3%
March 2004	112.9	106.4	94.2%	6.5	5.8%
July 2004	113.5	106.5	93.8%	7.1	6.2%
November 2004	113.8	106.4	93.5%	7.4	6.5%
March 2005	114.5	105.8	92.4%	8.7	7.6%
July 2005	114.4	107.5	94.0%	6.8	6.0%
November 2005	115.2	107.0	92.9%	8.2	7.1%
March 2006	115.5	107.2	92.8%	8.4	7.2%

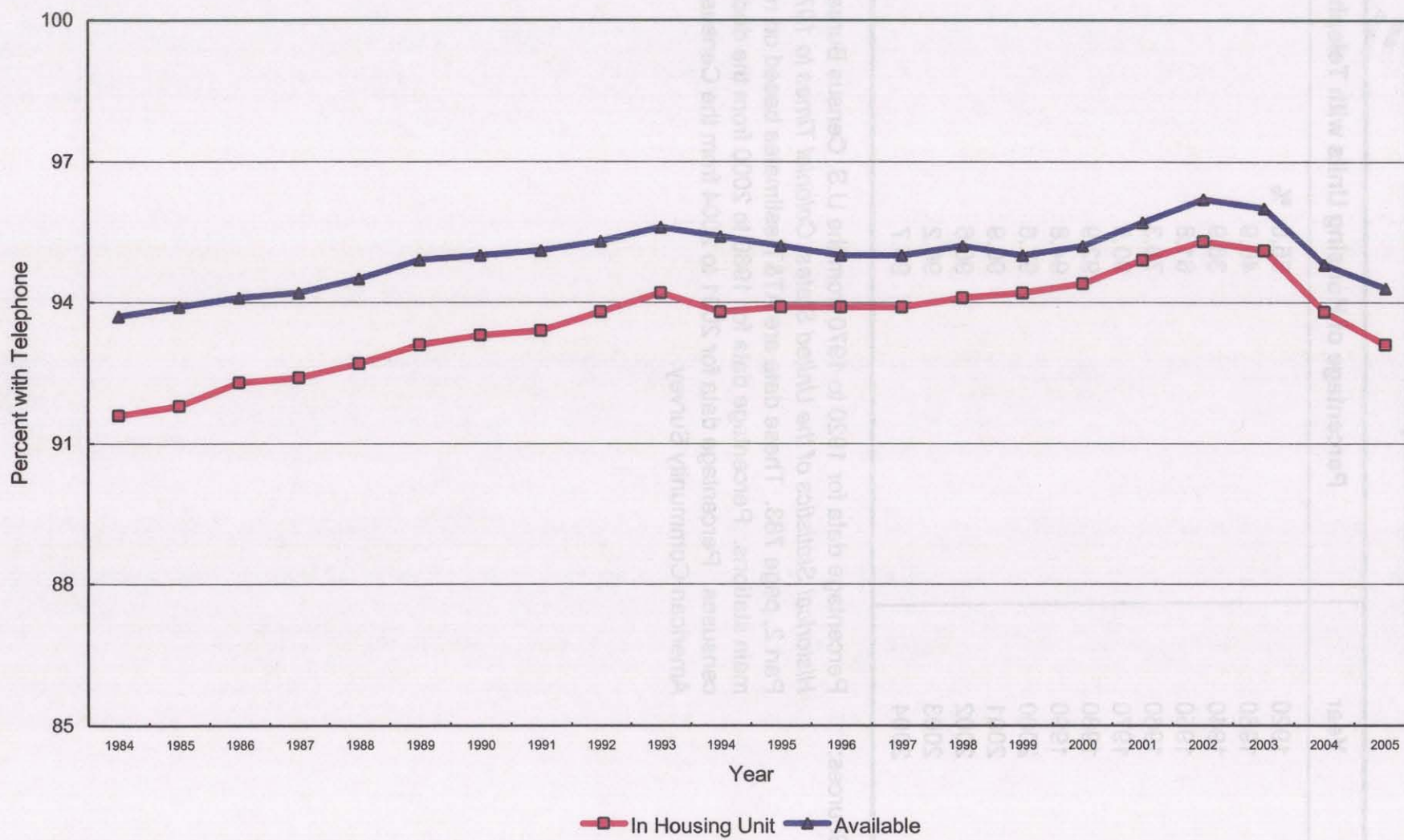
Note: Details may not appear to add to totals due to rounding.



Chart 6.1

## Telephone Penetration

Households



**Table 6.2**  
**Historical Telephone Penetration Estimates**

Year	Percentage of Housing Units with Telephones
1920	35.0 %
1930	40.9
1940	36.9
1950	61.8
1960	78.3
1970	90.5
1980	92.9
1990	94.8
2000	97.6
2001	96.9
2002	96.6
2003	96.2
2004	95.7

Sources: Percentage data for 1920 to 1970 from the U.S. Census Bureau, *Historical Statistics of the United States, Colonial Times to 1970*, Part 2, page 783. These data are AT&T estimates based on residential main stations. Percentage data for 1980 to 2000 from the decennial censuses. Percentage data for 2001 to 2004 from the Census Bureau's American Community Survey.